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ELECTRONIC DEVICE HAVING A BARRIER REGION INCLUDING ALUMINUM AND A METHOD OF MANUFACTURE THEREFOR

ABSTRACT OF THE DISCLOSURE

The present invention provides an electronic device having superior qualities. The electronic device includes an active region located over a substrate and an undoped layer located over the active region, the undoped layer having a barrier region including aluminum located thereover. The electronic device further includes a doped upper cladding layer located over the barrier region. In an exemplary embodiment of the invention, the barrier region is a barrier layer or a number of barrier layers located between a plurality of the undoped layers.